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CENTRAL INTELLIGENCE AGENCY

WASHINGTON 25, D. C.

OFFICE OF THE DIRECTOR

MEMORANDUM TO: Director, Psychological Strategy Board

SUBJECT: Flying Saucers

1. I am today transmitting to the National Security Council a proposal (TAB A) in which it is concluded that the problems connected with unidentified flying objects appear to have implications for psychological warfare as well as for intelligence and operations.

2. The background for this view is presented in some detail in TAB B.

3. I suggest that we discuss at an early board meeting the possible offensive or defensive utilization of these phenomena for psychological warfare purposes.

Walter B. Smith
Director

Enclosure



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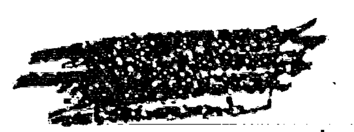
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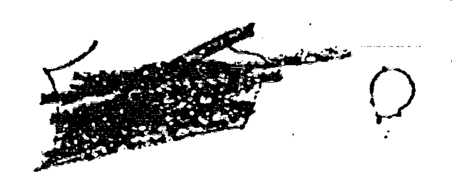
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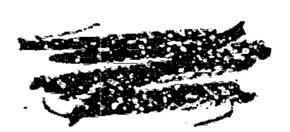
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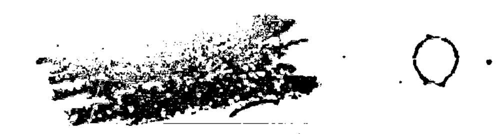


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PROBLEM:

It is the purpose of this study to determine what (national security problems) concern to CIA, if ~~any, is resident~~ are present in the problem of "unidentified flying objects," and to recommend, if such interest is found, steps that should be taken to ~~improve CIA's intelligence position on aspects related to national security.~~ solve the problems and lessen the risks.



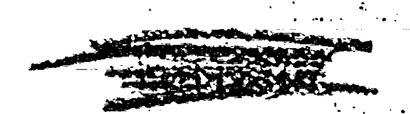


FACTS BEARING ON THE PROBLEM:

1. Since 1947, there have been about 1500 official reports of sightings plus an enormous volume of letters, phone calls and press reports. During this July alone, official reports totaled 250. Of the 1500, Air Force carries 20% as unexplained and of those received since the first of this year, 28% unexplained.

2. The administrative unit now handling the Air Force inquiry on these phenomena is a small section headed by an Air Force Reserve Captain, E. J. Ruppelt, assisted by two lieutenants and two secretaries at Air Technical Intelligence Center, Wright Field. It is from this small group that the controling collection directive to the entire Air Force originated and it is to this small group that the flood of reports on flying saucers comes for collation and analysis.

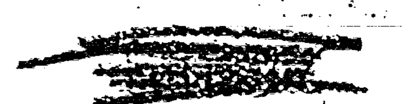
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The three man OSI team entered into its inquiry fully aware that it was coming into a field already charged with partisanship, one in which objectivity had been overridden by numerous sensational writers, and one in which there are pressures for extravagant explanations as well as for oversimplification. They consulted with a representative of Air Force Special ~~Projects~~ Studies group; discussed the problem with those in charge of the Air Force Project at Wright field; reviewed a considerable volume of intelligence reports; checked the Soviet press and broadcast indices; and conferred with three of our consultants at MIT, all leaders in their scientific fields.

The present small scale inquiry at ATIC, which thus far has been able only to use the case history approach, examining each incident carefully to determine whether it can be explained or whether it must be put into the "unexplained" category, was considered a perfectly valid procedure but one that offered but [illegible] in opening up explanations regarding the nature of these phenomena, [illegible] at MIT told us, it would probably be found on the margins or just [illegible] of our present knowledge in the fields of atmospherics, [illegible] extraterrestial phenomena, taking into account the possibility [illegible] a factor to consider. A systematic [illegible] unexplained cases would contemplate a centrally coordinated [illegible] a number of fronts and involving a variety of

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[illegible]

The problem of "[illegible]ied flying objects" is a national security problem of concern to operations as well as to intelligence.

2. Operational problems are of primary importance and should be attacked at once. They include:

a. Taking immediate steps to improve identification of "phantoms" so that in the event of an attack, instant and positive identification of enemy rockets or plans could be made.

b. Determination of what if any utilization should be made of these phenomena by US psychological warfare planners and what, if any, defenses should be planned in anticipation of Soviet attempts to utilize them.

3. Intelligence problems include.

a. Knowledge of the exact nature of these phenomena especially as regards:

(1) Whether any are susceptible to control, and can be thus utilized for either military or psychological offense or defense.

(2) Whether any are predictable and can thus be taken advantage of in military or psychological operations.

b. The present level of Russian knowledge regarding these phenomena.

c. Possible Soviet intentions and capabilities to utilize these phenomena to the detriment of US security interests.

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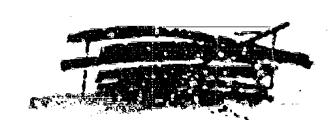
(2) Whether any are predictable and can thus be taken advantage of in military or psychological operations.

b. The present level of Russian knowledge regarding these phenomena.

c. Possible Soviet intentions and capabilities to utilize these phenomena to the detriment of US security interests.

d. The reasons for silence in the Soviet Press regarding "flying saucers".

4. Intelligence responsibilities in this field as regards both collection and analysis can be discharged with maximum effectiveness only after much more



The problem transcends [illegible] of individual departmental responsibilities, and is of such importance as to merit cognizance and action by the National Security Council.

6. Additional work, differing in character and emphasis from that presently under way will be required to meet the specific needs in this field of both operations and intelligence.

RECOMMENDATIONS:

One of the two ~~feasible~~ courses of action set ~~forth~~ forth below is proposed; one requires NSC action, and the other requires action by Secretary of Defense:

1. NSC action: under this course, it is recommended:

a. That the DCI present to the NSC a draft NSC directive (TAB A) which prescribes that a centrally administered research program under RDB be established, in accordance with Sec. 214 (a), National Security Act of 1947, this program having for its research objectives requirements to be specified by the Secretary of Defense, the Director of Central Intelligence, and Director Psychological Strategy Board.

b. That upon issuance of this NSC directive, CIA exercise its [illegible] function by providing coordinated intelligence requirements and [illegible] intelligence support to RDB.

2. Secretary of Defense action: under this course, it is recommended:

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2. <u>[illegible] Secretary of Defense action:</u> under this course, it is recommended:

a. [illegible] the DCI suggest to Secretary of Defense along lines of the [illegible] that coordinated research program would be valuable to CIA, and [illegible] a study is undertaken by Defense, ~~that~~ coordinated intelligence [illegible] be provided by CIA before the study is started.



DRAFT

NSC

SUBJECT: Unidentified flying objects.

1. The National Security Council has recognized as a national security problem our present limited capabilities in making prompt positive visual or mechanical identification of flying objects. The problem is recognized also as one which bears directly upon both offensive and defensive capabilities of the armed forces; as one of concern to operations as well as to intelligence; and as one having possible implications for psychological warfare.

2. As the nature of the problem is such that a centrally administered inquiry rather than a divided effort offers the best promise of progress, the Director, Research and Development Board is charged with the responsibility of administering in this field a program of research which meets the specifications of Secretary of Defense and as regards operational requirements; of the Director of Central Intelligence, as regards the intelligence requirements and of Director, Psychological Strategy Board, as regards psychological warfare implications.

A B B

DRAFT LETTER

FROM: DCI

TO : Secretary of Defense

SUBJECT: Intelligence interest in a study of unidentified flying objects.

1. Recently CIA's Office of Scientific Intelligence made an inquiry into the possible intelligence implications of this subject. We concluded that while the operational problem of improvement in identification of "phantoms" was of first priority because of the need to make instant and positive identification of enemy rockets or planes, the solution of intelligence problems are of sufficient importance to justify vigorous support by this Agency of an organized attack on the problem.

2. In our inquiry three of our men consulted with a representative of Air Force Special Projects group; discussed the problem with those in charge of the Air Force Project at Wright field; reviewed a considerable volume of intelligence reports; checked the Soviet press and broadcast indices; and conferred with three of our consultants at MIT, all leaders in their scientific fields.

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[illegible]ial phenomena, taking into account the possibility that nuclear waste products might also be a factor to consider. A systematic attack on the as-yet unexplained cases would contemplate a centrally coordinator program involving projects on a number of fronts and involving a variety of techniques not now used.

4. As the strictly US military operations problem of improved identification at home and abroad is closely tied to a number of intelligence questions, it would be advantageous to CIA, as well as to the interests of the intelligence components of Department of Defense, if intelligence research requirements could be included in any organized inquiry into the subject.

5. At this time we know so little of the exact nature of these phenomena that additional research would be necessary before it could be said whether any are susceptibel to control and can thus be utilized for either military or psychological offense or defense, or whether any are predictable, and can thus be taken advantage of in military or psychological operations.

6. It may be found that an appropriate center for such research would be in a group such as Project Lincoln which is now working for Department of Defense on problems of air defense.

7. At this time we are unable to find any basis in our information for [illegible] in Soviet intentions or capabilities to utilize these phenomena to our detriment. The Soviet Press has been silent on the subject — which is

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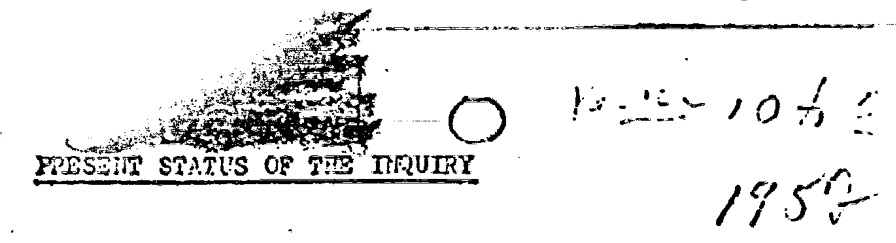
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8. It would be appreciated if this agency could participate in any plans for further inquiry into this subject.





PRESENT STATUS OF THE INQUIRY

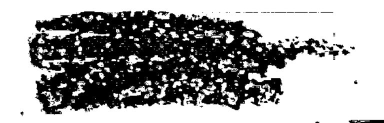
Mr. Strong has discussed with you some of the general features of this problem, and now I should like to describe briefly how the Air Force has organized its study of reports on unidentified flying objects and outline its methods.

The administrative unit now handling the Air Force inquiry on these phenomena is the unidentified Flying Objects Section of the Aircraft Propulsion Branch of the Technical Analysis Division of Air Technical Intelligence Center, Wright Field.

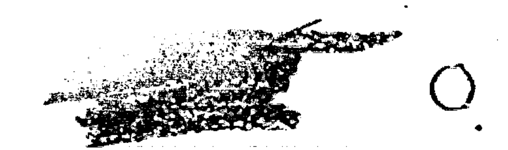
A T I C
T A D
A & P B R
U F O Sect.

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The strength and position of this central administrative group clearly indicates a low level of support, and, presumably, serious reservations in the Air Force regarding the value of extensive inquiry into the subject. Paradoxicall







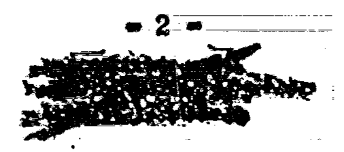
this central effort at ATIC is maintained on a minimal basis while there is concurrently ordered a world-wide reporting system and an interception program which may expend hundreds of man hours and thousands of dollars.

The methods used by Air Force are now in the process of change but the conclusions and explanations given to the public are based on the process I am going to describe.

Research and analysis at this time is limited almost exclusively to the case history method. Reports, which are limited in their coverage to ten broad elements of information, are received from the field, mainly through the Air-intelligence reporting system, though also to a limited extent from the other services and from the Department of State.

These reports come to the Unidentified Objects Section where each one are is examined separately to determine whether it is explainable as "misinterpretations of a known object", or whether it must be classed as "unexplained." and subject to further investigation.

In this sorting process, the reports are first examined in the light of established and readily available fact such as known balloon tracks or aircraft flights. The report may then be referred to an Air Force Base or to the Office





of Special Investigation for direct interrogation of the reporter. Also, in some cases the reports are referred to technical or scientific specialists for interpretation. It should be borne in mind that this is all on an individual case basis.

There has been no systematic or extensive use of other standard methods of processing data. It is true that there have been a few attempts to examine some of the broader questions that have been raised by these reports. ATIC has, for example, laboriously gone through the accumulation of "unexplained" US repor one by one, to plot them on a map. These plots show a high incidence of reported cases near atomic installations and Strategic Air Command bases but this might be expected because of the greater number of alert observers in such places. Actually, a number of accepted research techniques that should be used in any effort to gain a sound understanding of these phenomena, have not been employed.

There is, of course, some doubt regarding the extent and kind of effort required for the future. The Air Force has not yet found any great cause for concern. Captain Ruppelt remarked that, as the problem seems to be of more concern to operations than to intelligence, it might appropriately be moved out of intelligence to some operational command. (Within the last two weeks, he

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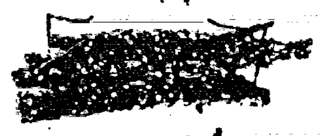
has tried, unsuccessfully, to hand the baby to Air Defense Command.)

Of the essential processes that might be used if Air Force considered the inquiry worth a full blown effort, we could list the following:

Research objectives should be defined in detail in relation to the questionnaire. The questions asked in the present collection directive are admitted to be inadequate even for the limited case-history approach. Further, the answers are not processed in such a way as to easily permit the determination of the lines of research and analysis that should be followed.

As there has been no preliminary determination of areas of most profitable research, there is no way at this time by which to isolate the important elements in each of the problem areas. No studies have been made, for example, to establish categories of the objects reported by shape, size, color, etc. or to show such things as shortest, longest and average duration of sightings of objects of various kinds.

These deficiencies have conspired against making cross-comparisons. There have been no studies, for example, that would compare certain weather conditions with the appearance of certain colors of lights.





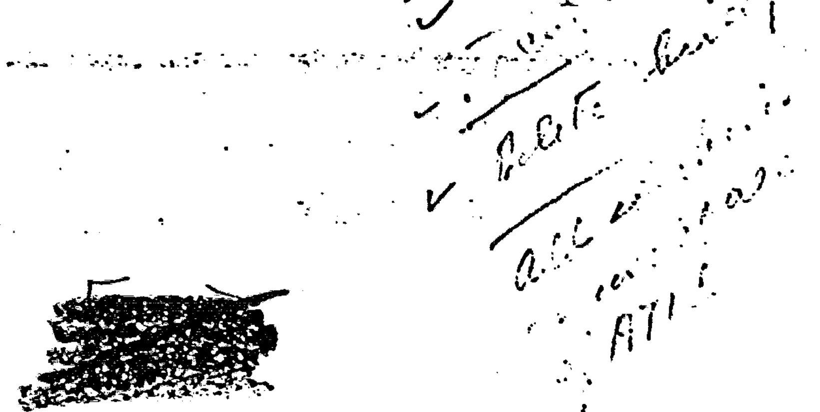
There are a number of standard analytical processes that might be used if ~~Air Force~~ this problem should be considered ~~the inquiry~~ worth a full blown effort. It might define in detail the research objectives to be used in relation to the questionnaire.

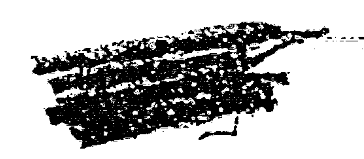
After the areas of most profitable research had been determined, a logical nex step would be to isolate the important elements in each problem area.

A third step would be to set up means by which to make ~~many~~ a number useful cross-comparisons. ~~Fourth~~ Finally, trend studies as well as area studies could be made.

Finally, there might be an objective study on the attributes of available data.

In summary, the limited central administrative support given to the project by Air Force, coupled with the extremely limited scope of the analytical work done thus far, has placed a strict ceiling on the kind of interpretations that can be made from material now available.



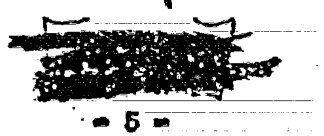


Trend studies as well as area studies could be made. [There is now no picture of how the various phenomena may have formed patterns, either as regards aggregation or dispersal over specific periods of time.]

Finally, there might be an objective study on the attributes of available data. [Thus far, reports themselves (not factors present within those reports) are only classed "explainable" or "not explained". It is not known to what extent, or where, elements of consistency may extend through both the collection of "explainable" and "not explained" reports.

Also, there is no means by which to sort out valid elements from otherwise "unreliable" reports, nor is there a means by which to sort out invalid elements from otherwise accurate reports. An illustration of a consequence of this limitation would be the probable unhappy fate of a valid report on what was actually an ionized cloud, when observed on a well established balloon track. It would, in all probability be classed "explainable" as a balloon. The relegation of this report to the "explained" category would take any valid elements present in the report out of the reach of later analysis.]

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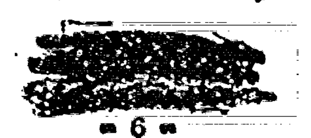



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done thus far, leads us to believe that any broad conclusions presently drawn can be accepted only with caution.

As to the future, a limited amount of improvement may be accomplished. A revised questionnaire, now being designed by Air Force and Battele Institute experts will give more detail to each case-history. We have heard informally, though, that many objects are not reported in Korea because of the burden of required paper-work. A longer questionnaire would make pilots even more reluctant to report their sightings. Also, many cross comparisons will be possible if present plans to use punch cards are carried out. In addition, improvements may be expected if Air Force follows through on its present plan to establish an advisory board of top level scientists. Further, the current plan to place emphasis on using instrumentation such as refraction grid cameras and new type Schmidt telescopes, will yield more usable facts. The absence thus far, however, of a well planned and properly guided research program makes it appear that it may be some time in the future before we can expect complete explanations of many of these phenomena.

For the next part of our presentation, Mr. Durant will discuss some of the factors that have been found, or may be involved, in these reports.


[redacted]

Part I - Weather Balloons

1. In the analysis of Flyobrpts prior to 1 Jul 52 approximately 15% were classified as "possibly" or "probably" balloon. The basis for decision was generally little more than a form of guesswork; if the Flyobrpt did not do anything, and much leeway was allowed for observer's fallibility, that a balloon could not do in maneuvers, speed, etc., and if the description corresponded even roughly to that of a balloon, it was so classified. If there was no particular reason to believe a balloon was in the area, the report became a "possible". If the sighting occurred near a balloon launching site or on or about the launch time, it became a "probable". It was obvious that an effort to obtain factual data to support such conclusions was in order.

2. ATIAA-5 approached the problem of weather balloons first. Weather balloons are of the following types:

a. Radiosonde - Rubberized tan latex, 6' in diameter at launch, up to 20' at altitude. Carries a transmitter and telemetering device for temperature pressure, dewpoint sequences, which transmitter under certain conditions would give radar returns. Also carries a white running light during night launches battery operated, which should last for duration of flight. Normal ascent is to 70,000' - 100,000', at ± 1,000 ft/min, at which altitude the balloon bursts and equipment recovery is effected by a red parachute.

b. Rawin - Same balloon as above, but it carries only a radar "triangle", and is a winds aloft observation.

c. Rawinsonde - Same, a combination of rawin and radiosonde.

d. Ratal - Same type of balloon, tracked by theodolite for winds aloft observation.

e. Pibal - A rubberized tan latex balloon, 30" in diameter at release and 4 or 5' at altitude. Burst and climb comparable to radiosonde. A winds aloft observation, tracked by theodolite. Carries running light for night launches.

All types of balloons are launched at 0300Z, 0900Z, 1500Z and 2100Z daily. However, some stations launch one, two, three, or four times daily; others launch irregularly, some launch only one type, and others several or all. In addition, time of launch may vary approximately thirty minutes from the scheduled time, either way. All agencies which launch balloons are quick to admit that balloons can malfunction and that many are lost. In addition, wind currents at altitude can cause the balloons to assume odd shapes and strange maneuvers. The balloons under certain atmospheric conditions can appear to be almost any color, and may be visible even at extreme altitudes, particularly at sunrise and sunset, to an observer on the ground.

3. ATIAA-5, faced with this situation, compiled in July a file of balloon launch data cards for Air Weather Service, Naval Air Weather Service, and Weather Bureau launch stations. In addition, this information is pictured graphically on the weather balloon launch location chart. Combining this information with the winds aloft data which ATIC receives from the facsimile charts has often provided a solution to Flyobrpts. Significantly, balloons, possible and probable, increased from 15% in June to 30% in August, with 24% in July. The percentage of reports analyzed as "unknown" decreased proportionately. This gain is a real one, and results from the accumulation of the background data and the elimination of guesswork.

4. The actual radiosonde meteorological information is extracted by all agencies launching balloons onto WBAN 31a, 31b, and 31c. For winds aloft observations, all agencies use WBAN 20 and 20a, and these forms also include the track of the balloon. All agencies forward these records to the National Weather Records Center, Grove Arcade Building, Asheville, North Carolina. ATIAA-5 has requested the CG, AWS, which maintains a detachment at Asheville, to permit "Blue Book" to deal directly with Asheville. The intention is to request photostats of the sounding (WBAN 31a, b, c) and the balloon track (WBAN 20 and 20a) at certain specific times and places. If this is approved, ATIC will be in a position to obtain these records for every balloon flight launched in the U.S., from overseas American bases, and from all the U.S. ships and weather stations at sea. In addition, ATIAA-5 will continue to use the balloon launch information available in this office and will from time to time TWX various launch sites for specific information. These methods of approach will solve the problem of weather balloons.

Part II - Upper Air Research Balloons

1. Specially designed types of balloons are used by the USAF and the U.S. Navy in cooperation with various contractors to obtain upper air data for scientific purposes. There is no doubt that these balloons cause Flyobrpts; tracking data of eleven such flights in July resulted in positive identification in three cases, probable identification in three more. The U.S. Navy, through its field representative of ONR at the University of Minnesota, deals with three contractors. The balloons released are large white polyethylene types capable of expanding to 100' in diameter and carrying up to 500 pounds of metallic equipment. Valve and inflation arrangements control floating altitudes. Naturally, they are visible even at extreme altitudes under many conditions and are capable of assuming almost any shape. The contractors often release from time to time free or attached clusters of the RA and P type rubberized balloons, as well.

2. These flights are often of long duration; one Minneapolis released balloon was tracked to Cape Cod and lost, then it was recovered in Bordeaux, France. They are tracked by ten RDF stations throughout the United States.
[illegible]

3. ATIAA-5 has taken steps to set up a reporting system for all balloon flights of the Navy contractors. This program will be implemented 15 Oct 52 and will permanently solve the problem of U.S. Navy upper air research balloons.

4. The USAF operates two projects, "Gopher" and "Moby Dick", which involve the release of the large polyethylene type balloons. In all particulars, flight durations, tracking methods, etc., these flights are comparable to the U.S. Navy projects. At present, ATIAA-5 has no communication or liaison with these projects, but ATIAA-5 intends to use the same approach and reporting systems with the USAF projects as with the Naval contractors.

Conclusion:

By 1 Nov 52 ATIAA-5 should be receiving complete data on all weather, Navy upper air, and USAF upper air balloon releases.

Note:

This paper is a short introduction to the "balloon phase" of Project Blue Book. For anyone desiring the complete information, such as agencies and personalities involved, channels and methods of communication, etc., it will be necessary to read the following supporting papers which are on file in ATIAA-5.

a. Balloon Data Folder

b. Miscellaneous Correspondence File - Letter 5 Sep 52, to: USAF Cambridge Research Center, Cambridge, Massachusetts, subj: Air Force Upper Air Research Balloon Releases, and first indorsement thereto.

c. Air Weather Service Correspondence File - Letter 22 Sep 52, to: CG, AWS, subj: Climatology Data for Project Blue Book.

d. U.S. Navy Correspondence File - Letter, 9 Sep 52, to: Air Branch, ONR, subj: ONR Upper Air Balloon Projects, and ONR answer thereto.

e. Travel Report - Lt A. G. Flues, 25 Aug 52 to Washington, D.C.

f. Travel Report - Lt A. G. Flues, 15 Sep 52, to Ashville, N.C.

g. Travel Report - Lt A. G. Flues, 30 Sep 52, to Minneapolis, Minnesota.